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 Data Compression Conference, 2003. Proceedings. DCC 2003 , 25-27 March 20  
 Page(s): 421

[\[Abstract\]](#) [\[PDF Full-Text \(261 KB\)\]](#) **IEEE CNF**
**2 Off-line testing of a wavelet packet-based algorithm for discriminative inrush current in three-phase power transformers***Saleh, S.A.; Rahman, M.A.;*
 Power Engineering, 2003 Large Engineering Systems Conference on , 7-9 May  
 Page(s): 38 -42

[\[Abstract\]](#) [\[PDF Full-Text \(406 KB\)\]](#) **IEEE CNF**
**3 Hardware implementation of a color image decoder for remote database access***Quackenbush, S.;*
 Acoustics, Speech, and Signal Processing, 1990. ICASSP-90., 1990 International  
 Conference on , 3-6 April 1990

Page(s): 985 -988 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(304 KB\)\]](#) **IEEE CNF**
**4 VLSI architectures of two-dimensional filters for HDTV coding***Pirsch, P.; Gruger, K.; Winzker, M.;*
 Circuits and Systems, 1992. ISCAS '92. Proceedings., 1992 IEEE International  
 Symposium on , Volume: 4 , 3-6 May 1992

Page(s): 1648 -1651 vol.4

[\[Abstract\]](#) [\[PDF Full-Text \(364 KB\)\]](#) **IEEE CNF**

---

**5 Taming the coupling effects during the design of multilayered substr.**

*Charruau, S.; Misson, H.; Touboul, A.;*

Electronic Manufacturing Technology Symposium, 1995, Proceedings of 1995 Japane  
International, 18th IEEE/CPMT International , 4-6 Dec. 1995

Page(s): 453 -455

[\[Abstract\]](#) [\[PDF Full-Text \(228 KB\)\]](#) **IEEE CNF**

---

**6 A low-power encoder architecture for pyramid vector quantization of subband coefficients**

*Namgoong, W.; Devenport, M.; Meng, T.;*

VLSI Signal Processing, VIII, 1995. IEEE Signal Processing Society [Workshop on  
16-18 Sept. 1995

Page(s): 391 -400

[\[Abstract\]](#) [\[PDF Full-Text \(448 KB\)\]](#) **IEEE CNF**

---

**7 Wavelet-based waveform relaxation simulation of lossy transmission**

*Wai-Hung Leung; Fung-Yuel Chang;*

Circuits and Systems, 1996. ISCAS '96., 'Connecting the World', 1996 IEEE  
International Symposium on , Volume: 4 , 12-15 May 1996

Page(s): 739 -742 vol.4

[\[Abstract\]](#) [\[PDF Full-Text \(284 KB\)\]](#) **IEEE CNF**

---

**8 On-line estimation of the parameters of long-range dependence**

*Roughan, M.; Veitch, D.; Abry, P.;*

Global Telecommunications Conference, 1998. GLOBECOM 98. The Bridge to Global  
Integration. IEEE , Volume: 6 , 8-12 Nov. 1998

Page(s): 3716 -3721 vol.6

[\[Abstract\]](#) [\[PDF Full-Text \(408 KB\)\]](#) **IEEE CNF**

---

**9 Line based reduced memory, wavelet image compression**

*Chrysafis, C.; Ortega, A.;*

Data Compression Conference, 1998. DCC '98. Proceedings , 30 March-1 April 1998

Page(s): 398 -407

[\[Abstract\]](#) [\[PDF Full-Text \(212 KB\)\]](#) **IEEE CNF**

---

**10 Memory-efficient scalable line-based image coding**

*Ordentlich, E.; Taubman, D.; Weinberger, M.; Seroussi, G.; Marcellin, M.W.;*  
Data Compression Conference, 1999. Proceedings. DCC '99 , 29-31 March 1999  
Page(s): 218 -227

[\[Abstract\]](#) [\[PDF Full-Text \(280 KB\)\]](#) **IEEE CNF**

---

**11 An algorithm for low memory wavelet image compression**

*Chrysafis, C.; Ortega, A.;*  
Image Processing, 1999. ICIP 99. Proceedings. 1999 International Conference on  
Volume: 3 , 24-28 Oct. 1999  
Page(s): 354 -358 vol.3

[\[Abstract\]](#) [\[PDF Full-Text \(536 KB\)\]](#) **IEEE CNF**

---

**12 Optimal adapted weighting of wavelet coefficients for on-board coded satellite images**

*Le Guen, D.; Pateux, S.; Labit, C.; Moury, G.; Lebedeff, D.;*  
Geoscience and Remote Sensing Symposium, 2000. Proceedings. IGARSS 2000  
2000 International , Volume: 2 , 24-28 July 2000  
Page(s): 588 -590 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(252 KB\)\]](#) **IEEE CNF**

---

**13 An efficient tool to study transmission lines using the wavelet packet decomposition**

*Antonini, G.;*  
Electromagnetic Compatibility, 2000. IEEE International Symposium on , Volume: 1  
21-25 Aug. 2000  
Page(s): 89 -94 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(344 KB\)\]](#) **IEEE CNF**

---

**14 Development of a compression algorithm suitable for exercise ECG**

*Uyar, K.; Ider, Y.Z.;*  
Engineering in Medicine and Biology Society, 2001. Proceedings of the 23rd Annual  
International Conference of the IEEE , Volume: 4 , 25-28 Oct. 2001  
Page(s): 3521 -3524 vol.4

[\[Abstract\]](#) [\[PDF Full-Text \(516 KB\)\]](#) **IEEE CNF**

---

**15 Wavelets for the analysis and compression of partial discharge data**  
*Ma, X.; Zhou, C.; Kemp, I.J.;*

Electrical Insulation and Dielectric Phenomena, 2001 Annual Report. Conference  
14-17 Oct. 2001  
Page(s): 329 -334

[\[Abstract\]](#) [\[PDF Full-Text \(331 KB\)\]](#) **IEEE CNF**

---

**16 Real-time generation of synthetic MPEG-4 video traffic using wavelets**  
*Lazaro, O.; Girma, D.; Dunlop, J.;*

Vehicular Technology Conference, 2001. VTC 2001 Fall. IEEE VTS 54th , Volume  
2001  
Page(s): 418 -422 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(424 KB\)\]](#) **IEEE CNF**

---

**17 Analysis of wavelet transform implementations for image and textural  
coding applications in programmable platforms**

*Andreopoulos, Y.; Schelkens, P.; Cornelis, J.;*  
Signal Processing Systems, 2001 IEEE Workshop on , 26-28 Sept. 2001  
Page(s): 273 -284

[\[Abstract\]](#) [\[PDF Full-Text \(616 KB\)\]](#) **IEEE CNF**

---

**18 A line-based, memory efficient and programmable architecture for 2D  
DWT using lifting scheme**

*Wei-Hsin Chang; Yew-San Lee; Wen-Shiaw Peng; Chen-Yi Lee;*  
Circuits and Systems, 2001. ISCAS 2001. The 2001 IEEE International Symposium  
on , Volume: 4 , 6-9 May 2001  
Page(s): 330 -333 vol. 4

[\[Abstract\]](#) [\[PDF Full-Text \(292 KB\)\]](#) **IEEE CNF**

---

**19 An embedded core for the 2D wavelet transform**

*Diou, C.; Torres, L.; Robert, M.;*  
Emerging Technologies and Factory Automation, 2001. Proceedings. 2001 8th  
International Conference on , Volume: 2 , 15-18 Oct. 2001  
Page(s): 179 -186 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(909 KB\)\]](#) **IEEE CNF**

---

**20 Wavelet based data compression technique in fault location using travelling wave signal**

*Huang Xianfeng; Chen Yunping;*

Power System Technology, 2002. Proceedings. PowerCon 2002. International Conference on , Volume: 2 , 13-17 Oct. 2002

Page(s): 1132 -1136 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(458 KB\)\]](#) **IEEE CNF**

---

**21 Stripe-based MSE control in image coding**

*Parisot, C.; Antonini, M.; Barlaud, M.;*

Image Processing. 2002. Proceedings. 2002 International Conference on , Volu 22-25 Sept. 2002

Page(s): II-649 -II-652 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(383 KB\)\]](#) **IEEE CNF**

---

**22 A VLSI architecture of spatial combinative lifting algorithm based 2-DWT/IDWT**

*Leibo Liu; Xuejin Wang; Hongying Meng; Li Zhang; Zhihua Wang; Hongyi Chen*

Circuits and Systems, 2002. APCCAS '02. 2002 Asia-Pacific Conference on , Vo 2 , 28-31 Oct. 2002

Page(s): 299 -304 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(570 KB\)\]](#) **IEEE CNF**

---

**23 Generic RAM-based architecture for two-dimensional discrete wavelet transform with line-based method**

*Po-Chih Tseng; Chao-Tsung Huang; Liang-Gee Chen;*

Circuits and Systems, 2002. APCCAS '02. 2002 Asia-Pacific Conference on , Vo 1 , 28-31 Oct. 2002

Page(s): 363 -366 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(423 KB\)\]](#) **IEEE CNF**

---

**24 Flipping structure: an efficient VLSI architecture for lifting-based discrete wavelet transform**

*Chao-Tsung Huang; Po-Chih Tseng; Liang-Gee Chen;*

Circuits and Systems, 2002. APCCAS '02. 2002 Asia-Pacific Conference on , Vo  
1 , 28-31 Oct. 2002  
Page(s): 383 -388 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(480 KB\)\]](#) **IEEE CNF**

---

25 **Wavelet-based compared to function-based on-line signature verific**  
*Vergara da Silva, A.; Santana de Freitas, D.;*  
Computer Graphics and Image Processing, 2002. Proceedings. XV Brazilian  
Symposium on , 7-10 Oct. 2002  
Page(s): 218 -225

[\[Abstract\]](#) [\[PDF Full-Text \(1683 KB\)\]](#) **IEEE CNF**

---

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Chrysafis, C. Ortega, A.

Hewlett-Packard Labs., Palo Alto, CA;

*This paper appears in: Image Processing, 1999. ICIP 99. Proceedings. 1 International Conference on*

Meeting Date: 10/24/1999 -10/28/1999

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### Abstract:

As wavelet-based image coding is set to become more widely used (e.g. with completion of the JPEG2000 standard), memory efficiency for wavelet-based coding is becoming an increasingly important issue. In this paper we present complete system to perform low memory wavelet image coding. Our approach "line-based" in that the images are read line by line and only the minimum number of lines is kept in memory. The line-based transform is combined with low memory entropy coder that does not require any global image information system achieves a large (two orders of magnitude) reduction in memory requirements compared to other available coders, with limited performance loss (e.g., less than 0.5 dB)

### Index Terms:

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